

Date: Thu, 18 Aug 94 04:30:34 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V94 #229
To: Ham-Space

Ham-Space Digest Thu, 18 Aug 94 Volume 94 : Issue 229

Today's Topics:

 ARLK033 Keplerian data
 ARLK034 Keplerian data
 How to phase two loops for satellite
 Perseids data for MS-Soft
 STS-68 - SAREX?
 Where can I find RG-302 & RG-303 ?

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 15 Aug 1994 08:03:41 MDT
From: parc!biosci!agate!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!
nnntp.cs.ubc.ca!alberta!ve6mgs!usenet@decwrl.dec.com
Subject: ARLK033 Keplerian data
To: ham-space@ucsd.edu

SB KEP @ ARL \$ARLK033
ARLK033 Keplerian data

ZCZC SK01
QST de W1AW
Keplerian Bulletin 33 ARLK033
>From ARRL Headquarters
Newington, CT August 13, 1994
To all radio amateurs

SB KEP ARL ARLK033

ARLK033 Keplerian data

Thanks to NASA, AMSAT and N3FKV for the following Keplerian data.

Decode 2-line elsets with the following key:

1 AAAAAU 00 0 0 BBBB.BBBBBBBB .CCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGG HHH.HHHH III.IIII JJ.JJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

STS-68

1 99968U 94230.76050690 .00169786 00000-0 85389-4 0 10
2 99968 57.0052 28.8010 0009698 270.9951 89.0013 16.20039161 62

AO-10

1 14129U 83058B 94215.22805310 -.00000302 00000-0 10000-3 0 2952
2 14129 27.0009 314.8290 6026240 199.5326 120.6764 2.05881876 55785

RS-10/11

1 18129U 87054A 94217.28360494 .00000025 00000-0 11516-4 0 9337
2 18129 82.9261 292.5558 0010124 247.8358 112.1720 13.72339818356645

UO-11

1 14781U 84021B 94217.06002530 .00000040 00000-0 14575-4 0 7140
2 14781 97.7858 229.4962 0012777 110.4929 249.7644 14.69234472557488

RS-12/13

1 21089U 91007A 94217.39047551 .00000045 00000-0 32006-4 0 7143
2 21089 82.9224 334.9539 0029126 335.0529 24.9214 13.74044464175408

AO-13

1 19216U 88051B 94217.83984689 .00000387 00000-0 10000-4 0 9420
2 19216 57.7558 238.0897 7222395 347.4623 1.5383 2.09718451 15557

UO-14

1 20437U 90005B 94218.18895812 .00000006 00000-0 19249-4 0 161
2 20437 98.5892 302.2855 0011936 46.0694 314.1470 14.29851355236737

AO-16

1 20439U 90005D 94217.75283107 -.00000015 00000-0 11061-4 0 8144
2 20439 98.5976 303.1403 0012252 47.9314 312.2905 14.29905175236688

DO-17

1 20440U 90005E 94218.19210523 -.00000009 00000-0 13563-4 0 8150
2 20440 98.5990 303.9154 0012353 46.3033 313.9171 14.30044972236763

WO-18

1 20441U 90005F 94217.74852435 -.00000013 00000-0 12029-4 0 8178
2 20441 98.5971 303.4730 0012875 48.1720 312.0554 14.30019028236703

LO-19

1 20442U 90005G 94218.21310999 .00000015 00000-0 22584-4 0 8130
2 20442 98.5997 304.2035 0013244 45.1759 315.0483 14.30116058236782

FO-20

1 20480U 90013C 94217.87774967 -.00000003 00000-0 70241-4 0 7119
2 20480 99.0417 0.3238 0539937 226.8819 128.5911 12.83227042210500

AO-21

1 21087U 91006A 94219.64318363 .00000093 00000-0 82657-4 0 4970

2 21087 82.9451 104.6442 0034599 302.9191 56.8638 13.74543144176652
 U0-22
 1 21575U 91050B 94218.20224585 .00000014 00000-0 19326-4 0 5184
 2 21575 98.4322 291.6827 0008025 134.4659 225.7181 14.36926162160263
 K0-23
 1 22077U 92052B 94217.92262333 -.00000037 00000-0 10000-3 0 4135
 2 22077 66.0796 175.8457 0015291 273.5107 86.4157 12.86286834 93184
 K0-25
 1 22830U 93061H 94218.18413095 -.00000061 00000-0 -73176-5 0 3160
 2 22830 98.5513 290.2453 0012359 33.3635 326.8318 14.28060392 44831
 K0-25?
 1 22828U 93061F 94218.18371130 .00000007 00000-0 20487-4 0 2893
 2 22828 98.6463 293.5448 0011223 49.3829 310.8324 14.28062056 12917
 IO-26
 1 22826U 93061D 94218.74557302 -.00000007 00000-0 15122-4 0 3117
 2 22826 98.6511 294.0850 0010155 63.7174 296.5049 14.27735455 44905
 AO-27
 1 22825U 93061C 94218.20757382 -.00000025 00000-0 75865-5 0 3118
 2 22825 98.6513 293.5078 0009619 62.7450 297.4711 14.27630597 44829
 PO-28
 1 22829U 93061G 94218.19016610 .00000007 00000-0 20563-4 0 3047
 2 22829 98.6466 293.5646 0011060 52.1754 308.0431 14.28035627 44837
 Mir
 1 16609U 86017A 94221.93487962 .00001989 00000-0 34044-4 0 7040
 2 16609 51.6487 277.5061 0001334 205.0665 155.0254 15.56756678484394

Keplerian bulletins are transmitted twice weekly from W1AW.
 The next scheduled transmission of these data will be Tuesday,
 August 16, 1994, at 2230z on Baudot and AMTOR.

NNNN

/EX

 Date: Tue, 16 Aug 1994 19:28:17 EDT
 From: dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!
 uhog.mit.edu!news.mtholyoke.edu!news.umass.edu!news2.near.net!usenet.elf.com!rpi!
 psinntp!arrl.org!@ihnp4.ucsd.edu
 Subject: ARLK034 Keplerian data
 To: ham-space@ucsd.edu

SB KEP @ ARL \$ARLK034
 ARLK034 Keplerian data

ZCZC SK02
 QST de W1AW
 Keplerian Bulletin 34 ARLK034

Date: Tue, 16 Aug 94 13:57:23 PDT
From: munnari.oz.au!foxhound.dsto.gov.au!fang.dsto.gov.au!yoyo.aarnet.edu.au!
news.adelaide.edu.au!news.cs.su.oz.au!harbinger.cc.monash.edu.au!
yeshua.marcam.com!news.kei.@@ihnp4.ucsd.edu
Subject: How to phase two loops for satellite
To: ham-space@ucsd.edu

I want to homebrew a M2 type eggbeater antenna for the 10 meter RS satellites downlink, however I not quite sure on how to tie them together at the feed point.

The eggbeater antenna is two circular loops at 90 deg to each other, both feed 180 out of phase, into a 50 ohm coax feed. The phase will determine if its right or left hand circularly polarized overhead. I don't want to use 75 or 93 ohm coax delay lines, to bulky. I would rather use some sort of small L/C circuit what I can mount into a small 1x2 inch box with a S0239 on it. This is for receive only, so RF power handling capabilities is not a concern. I've seen this done at a field day site, however I didn't get the configuration of the box.

Any diagrams, part values or just ideas are welcome.

73s, WB7ASR...

tom_boza@ccm.hf.intel.com

Date: 16 Aug 1994 10:18:41 GMT
From: ucsnews!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!europa.eng.gtefsd.com!
howland.reston.ans.net!math.ohio-state.edu!jussieu.fr!univ-lyon1.fr!
swidir.switch.ch!newsfeed.ACO.@@ihnp4.ucsd.edu
Subject: Perseids data for MS-Soft
To: ham-space@ucsd.edu

Perseids data files available !

Perseids 1994 data files for OH5IY's MS software are available via ftp at ftp.funet.fi:/pub/ham/vhf-work/msdata94.zip. This file contains currently only Perseids '94 data, data for all earlier showers is included in v4.2e which is the latest version of this software (available at same address). Place the data files as /msdata/per94.b1 and /msdata/per94.m1.

Perseids 1994 as seen from these graphs (measured at 87 MHz):

The first peak occurred on Aug 12 at 10-11 UT (max number of bursts at 10 UT,

max total reflection time at 11 UT). The first peak was very good for about 4 hours or so (09-13 UT). MS-Soft v4.2e predicted this peak to be at 1020 UT, not bad !!! No surprise, the peak was lower than last year.

The second peak occurred on Aug 13 at 03 UT. This peak was somewhat lower than the first one but broader. Good reflections for about 10 hours (01-11 UT).

NOTE: Perseids 1994 data files are not comparable with 1993 files due to changes in the measurement system on Sept 1, 1993.

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Jukka OH6DD jsi@hut.fi

Date: 17 Aug 1994 13:51:37 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!wupost!news.utdallas.edu!fozzy.aud.alcatel.com!usenet@network.ucsd.edu
Subject: STS-68 - SAREX?
To: ham-space@ucsd.edu

I haven't yet seen anything that sez STS-68 will be a SAREX mission.
Is it? Tnx.

Robert - N5UPF

Date: Wed, 17 Aug 94 07:53:52 PDT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!cs.utexas.edu!convex!news.duke.edu!MathWorks.Com!news.kei.com!ssd.intel.com!chnews!news@network.ucsd.edu
Subject: Where can I find RG-302 & RG-303 ?
To: ham-space@ucsd.edu

Im rebuilding the phaseing delay lines for my KLM amateur satellite yagis and need to located a source to acquire about ten feet of RG-302 75 ohms and ten feet of RG-303 50 ohms, teflon coax cable.

RG-302 & RG-303 both have teflon dielectric and a silvered copper shield, both have inner conductors of silver-plated copper-plated steel. They are designed for high-temperature operation. I suspect they were selected by the antenna manufacturer because of low temperature coefficients. I don't want to use Radio Shack 75 ohm TV cable.

Different velocity factors between teflon and polyethylene.

polyethylene = 66.5% teflon = 69%

KLM sells the complete phaseing kit replacements for \$49 each, however I feel I should be able to replace just the coax for at least half that price.

If anyone knows of a source for RG-302 & RG-303, please post here or reply via eMAIL direct.

Thanks and 73s,
Tom - WB7ASR... (not speaking for Intel)

tom_boza@ccm.hf.intel.com

Date: (null)
From: (null)

End of Ham-Space Digest V94 #229
